Convergence and Consensus:
The Political Economy of Stabilisation, Poverty and Growth

By

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1. INTRODUCTION

The purpose of this paper is primarily to provide a critical overview of the macroeconomic theory that has informed the financial programming, FP, of the IMF. It does so against a background of increasing rhetoric of “consensus”, not least between the IMF and the World Bank. The consensus is marked by the shift from Washington to post Washington consensus, PWC. Clearly, however, there is dissonance between the theory and practice of consensus. The forced resignation of Joe Stiglitz, Chief Economist at the World Bank, followed from his public criticism of the IMF. Within a couple of years, he was awarded the Nobel Prize in economics, in part for his contribution in founding the new development economics, Nobel (2001). In retrospect, the more progressive PWC in principle has been used to justify even more austere interventions in practice rather than to challenge them. For the Washington consensus (and neo-liberalism) is highly interventionist under the veil of being committed to the market, whilst the PWC intervenes on the basis of the presence and potential correction of market and institutional imperfections. Emergence of a “new consensus” has prematurely been heralded by Singer (1997) who argued the “pendulum is swinging back” to some form of Keynesian thinking in the development discourse. Singer is obviously referring to the PWC and notes that as far as the debate is concerned there is, p. 293/5:

no known method or firm empirical basis for an accurate comparison of government failure vs. market failure. There may be a Nobel prize waiting for someone who invents such common scale! In terms of policy, this may not matter all that much: both schools could agree that it is important to improve both government performance and market performance. Today the pendulum seems to be swinging back to such an intermediate position…away from the Washington Consensus, although not necessarily directly back to a new Keynesian Consensus.

Nor should the differences between the World Bank and the IMF be exaggerated at the level of macroeconomic theory although, in these and other respects, it has always been useful for some to present them as good cop and bad cop, respectively. The PWC is based upon the new Keynesian micro-foundations and focuses upon market imperfections which, when taken together or projected onto the macroeconomy, yield results of a Keynesian quality. Prices might not adjust to clear markets, excess demand can co-exist with excess capacity, developing economies are particularly prone to structural features and institutions corresponding to market imperfections that impede adjustment and stabilisation and that warrant state intervention, less severe macro-policy, and a considered and efficient balance between multiple policy objectives.

Yet, the IMF’s approach to FP has increasingly evolved to embrace ever more complex modelling. For, over the years, the IMF’s analytical position has shifted from being rooted in the simplest versions of the monetary approach to the balance of payments to being dependent upon a range of economic theory and factors. Since the mid 1980s the FP framework has been accompanied by supply-side structural policies, which extended the IMF’s of short-term stabilisation to medium- to long-term adjustment objectives. The move from stabilisation to adjustment is addressed in two ways, as the IMF attempts to extricate itself from the bondage of FP, which is short term and monetarist, and enter into long-run supply-side eclecticism. The first is to rely on mainstream economic analysis of financial and trade liberalisation, price deregulation and privatisation. These have been extensively discussed in the literature. The second line of address, tentatively broached and more or less overlooked in the literature, is to merge the IMF’s FP model with the World Bank’s Revised Minimum Standard Model (RMSM). It is evident from the discussion below that these models fall short of satisfying critics who highlight continuing theoretical deficiencies and inconsistencies.
How the IMF’s moves towards adjustment are to be interpreted, however, depends upon whether a perspective is taken that is forward- or backward-looking from the original model of FP based on the Polak (1957) model. Polak (1997), in reviewing the place of his model after forty years, is forward-looking in the sense of asking how it has adapted and survived in the light of the demands placed upon it. He remains skeptical about the worth of general, universally applicable models and merely seeks to provide a framework within which guesswork can be employed. He reiterates the results and relevance of the earlier model, emphasising dependence upon a constant income velocity of money, but also stresses the limitations of the approach, rendering it inapplicable for economies in transition for example. He is concerned with the short run, with correcting the balance of payments through a squeeze on domestic credit creation, and is skeptical about the extent to which the model can be extended over time or to other policy objectives other than through reiteration of guesswork concerning macroeconomic estimates. Stick to FP within its limitations is his core message.

Consider, for example, one of his “counterintuitive” findings, that “constitute a useful bag of knowledge for international officials in their relations with national policy makers”. For Polak, an increase in output, including exports, from whatever source will only provide temporary relief to the balance of payments since the rise in income will ultimately leak out into higher imports. However, for this result to hold, and others that he gives, it is necessary for the economy to function in the most restricted fashion – no extra investment and capacity from the increased output and, presumably saving and investment, let alone the release of any dynamic economies of scale and scope. There is a perverse logic to the Polak position in which, because the economy is perceived to be highly rigid and inflexible, so macroeconomic policy is adopted to reflect and possibly make it so!

By contrast, consider the Development Macroeconomics text of Agénor and Montiel (1996), running to nearly 700 pages. Although “the product of many years of research … mostly in the stimulating environment of the Research Department of the International Monetary Fund”, p. vi, only a handful of pages are devoted to FP. They can be considered to be backward looking, rejecting the use of the models attached to FP in view of their excessive simplicity. Indeed, they offer the judgment that, among the most parsimonious models aimed at quantifying the effects of stabilisation programs and medium-term growth policies are those of the IMF and the World Bank, p. 423. Instead, they offer a macroeconomics that falls entirely within the new microfoundations of macroeconomics for which FP and the monetary approach to the balance of payments are an irrelevance as starting point. For them, p. 11/12:

We do not believe that economic agents in developing countries behave differently from those in industrial economies, in ways that are inconsistent with the rational optimising principle of neoclassical microeconomics; rather, we believe that they behave similarly to their industrial counterparts, but operate in a different environment. Our perspective is that the standard analytical tools of modern macroeconomics are indeed of as much relevance to developing countries as they are to industrial countries, but that different models are needed to analyse familiar issues.

In place of different analytical principles, Agénor and Montiel offer what they term structural differences in order to provide a specifically development macroeconomics. In this respect, they are themselves most parsimonious. For, by structural, they merely mean imperfectly working markets such as the informal sector, labour market segmentation, or financial repression, or differences in the composition or source of output, as in heavy reliance upon public sector production, agriculture, working capital or imported intermediate goods. For them, explicitly seeking to provide a counterbalance to what is presumed to be the extreme stances adopted by leading structuralists such as Lance Taylor, p. 3

Many of the areas in which “orthodox” thinking has provided much insight (has) … ironically, even strengthened new structuralist arguments.

It is important to recognise that such structuralist arguments (and development economics and studies more generally) are being appropriated and reinterpreted within a mainstream neoclassical microeconomic framework.

Unfortunately, the idea of convergence of both the IMF and the World Bank on an increasingly sophisticated macroeconomic theory is, in part, ill-founded. For we begin in the next
section by showing how their explicitly common pre-occupation with poverty has given rise to such poor and inappropriate theory as to border on, if not move far beyond, the ridiculous. This is surely not some accidental aberration but derives from the longstanding commitment to “sound finance” at the expense of addressing the problems of development and growth, let alone poverty. Thus, in section 3, we revisit the FP model that originated with and evolved from Polak’s (1957) simplest of treatments. In section 4, we provide an overview of the heavy criticisms that FP has attracted. In general, however, these have not provided a close examination of the relationship between the model of the short and long runs previously attached, respectively, to the IMF and the World Bank. This is despite an attempt to integrate the two approaches from within the Washington consensus itself, most notably in the papers of Khan and Montiel (1989 and 1990) in debate with Polak (1990). But, in coming to terms with the old consensus, this is particularly important for, as will be shown in section 5, the analytical postures adopted by the World Bank and IMF, taken together and integrated, are essentially worthless on their own technical grounds. This conclusion arises out of the implicit relationship between short-run stabilisation and long-run growth. Effectively, stabilisation has been unwittingly designed around a zero growth rate or an unstable growth path, neither of which, surely, is acceptable as the basis for policy making for any, let alone a developing, economy. It is essentially worse than useless in dealing with the twin goals of growth and stability. If the IMF was concerned with the short run and stabilisation, and the World Bank with the long run and growth, the presumption that their respective activities can be treated as independent of one another, or mutually reinforcing, is totally fallacious.

In short, three broad conclusions can be drawn from this account. First, both in absolute terms and relative to concomitant best mainstream practice, the macroeconomic theory and rationale underlying FP models have been sorely inadequate, especially in the context of development. Second, more specifically, even on their own terms, such models have failed to interrogate the relationship between short and long runs, and are totally inappropriate for addressing issues of transformation, growth and poverty. Third, despite mountains of legitimate criticism levelled against FP, the weaknesses presented here have rarely been exposed and highlighted. This is not to suggest that “stabilisation” is bad, only that FP does not offer an appropriate framework for it. This reflects the overcommitment of FP to financial austerity and a corresponding undercommitment to understanding development itself and the specificities attached to individual countries. The concluding remarks briefly point to alternatives to the dictum that “one (or other) model fits all”.

2 From FP to PRSPs?

The IMF’s FP has been with us for fifty years. Recently, it has been subject to what appears to be a major change. Increased emphasis has been placed upon poverty reduction and in a way that reflects sensitivity to the critical concerns that had gathered over the previous decade. As Ames et al (2001), which ironically professes not to “reflect the official policies or approaches of either the World Bank or the International Monetary Fund”, puts it:

There has been an emerging consensus on how to make actions at the country level, and the support of development partners, more effective in bringing about sustainable poverty reduction. This consensus indicates a need for poverty reduction strategies that are: country-driven with broad participation of civil society, elected officials, key donors, and relevant International Finance Institutions; outcome-oriented; and developed from an understanding of the nature and determinants of poverty. Under the new framework, the country-led strategy would be presented in a Poverty Reduction Strategy Paper (PRSP), which is expected to become a key instrument for a country’s relations with the donor community.

It might be thought that with such a consensus, forged on the basis of past experience and research, would benefit from a sophisticated theoretical framework, elaborated in detail and subject to critical assessment of strengths and weaknesses. Nothing could be further from the truth. Consider the paper put forward to provide the new framework, Devarajan et al (2000). It begins by setting itself a number of objectives, including that of identifying “critical trade-offs in poverty-reducing macroeconomic policies”. This is unduly pessimistic in assuming that poverty alleviation must come at the expense of something else and in failing to seek out positive-sum outcomes. Further, bizarre is the requirement that, “the framework should be simple enough that operational economists can use it on their desktops. This means it should not make undue demands on data, it should be based on readily
available software ... and – most important – should permit ready interpretation of model results”. It seems that the needs of economists take precedence over those of the poor!

These polemics aside, the paper unquestioningly takes the FP model as framework and reads it into the “1-2-3” model. This is a general equilibrium model with no account taken of the possibility of externalities or multiple equilibria (poverty traps for example). But, almost unbelievably, it is also assumed that there is full employment and a single labour market. In other words, although this is not made explicit, everyone gets a job who wants one and is paid the same wage. As the two major sources of poverty, wherever and however you care to define it, are low wages and unemployment, it is not clear how poverty can begin to be addressed within the model.

The answer is to ignore these difficulties and move to consideration of growth and its impact on poverty. Two options are offered. One is to deploy Barro-type regressions for their growth coefficients even though these have been shown to be entirely unacceptable for a whole range of reasons. Still the procedure allows poverty to be examined indirectly, for example, through the coefficient of 0.0055 for an increase in telephone lines per thousand people, or of –0.0092 for permitting a black market on foreign exchange. Accordingly, growth-induced poverty would be less if we had more telephones and less black market. Irrespective of the dubious merits of the associated empirical work, this has little or no causal content. This is made explicit in the second growth model option – to run a trivariate vector autoregression between government policy (or shocks), the real exchange rate and growth. This is, of course, chart-drawing writ large and complicated, without theoretical or causal content at all.

There are many other criticisms that could be made – state expenditure cannot create employment and alleviate poverty for example. No doubt, other models could handle some of these criticisms. The point remains, however, that commitment to FP seems to have induced the most crass theoretical framework. As will be seen, this is not for the first time and, by seeking to incorporate poverty, the framework has even regressed over whatever analytical progress had otherwise been achieved.

Various studies attempt to link macroeconomic policy with poverty reduction. However, nearly all fall in the trap of examining the impact of macroeconomic policies on, for example income distribution, rather than study the content of the policies in addressing poverty. For instance, Easterly (2000) finds that adjustment-led expansion is not pro-poor just as adjustment-led contraction is not anti-poor. According to Easterly, the poor in general are more or less unaffected by adjustment because most operate in the informal sector or subsistence production, they are dislocated from the rural economy, and much of the safety net is absorbed by the middle class. Dollar and Kraay (2000) claim that the income of the poor rises one-for-one with overall growth. This holds for the bottom fifth of the population and the impact of growth on income of the poor is no different in poor countries than for rich ones. As Elson and Cagatay (2000) rightly note the “IMF and the World Bank pose the issue in terms of the social impact of macroeconomic policy rather than the social content of macroeconomic policy”. This means they fail to consider the “balance of social power”, which determines the choice of policy, but focus on the impact of programs on poverty. The conclusions are: 1) growth does not necessarily imply trickle-down and social justice; 2) inequality itself hinders growth, for instance unequal access to education means under-capacity in human capital; and 3) temporary safety nets do not constitute a poverty reduction policy, p. 1348:

[A]n alternative approach to considering social policies as an afterthought to macroeconomic policies would start with the premise that all macroeconomics policies are enacted within a certain set of distributive relations and institutional structures; and that all macroeconomic policies entail a variety of social outcomes which need to be made explicit. According to such an outlook, “soundness” of macroeconomic policies would be judged not on market-based criteria per se, but in terms of whether they ultimately succeed in bringing societies closer to achieving social justice. Thus, desired social outcomes such as distributive justice, equity, provisioning of needs for all, freedom from poverty and discrimination, social inclusion, development of human capabilities become the ultimate goals of policymaking, including macroeconomic policy making.
Such considerations have long been (pointed out to be) outside the IMF’s effective frame of reference other than for rhetorical purposes. Corresponding criticism ought to have been enough to have blown such financial programming, and its rationale, away. But it has not, so we engage in an internal critique of the underlying models themselves – although we cannot be sanguine about the results of doing so!

3. MACROECONOMIC STABILISATION UNDER THE WASHINGTON CONSENSUS

Stabilisation and structural adjustment have been, and continue to be dominated by IMF FP. As a result, it might be thought that there would be a well-established and explicit account of its features and analytical underpinnings. Nothing could be further from the truth. As is observed in a paper intended to elaborate, “theoretical aspects of the design of fund-supported adjustment programs”, IMF (1987, p. 1), FP:

is based largely on oral tradition. There is surprisingly little readily accessible written material on its theoretical underpinnings, in particular, on the interaction among policy measures in achieving the ultimate objectives … Since the early 1970s, however, the conception and the structure of adjustment programs have gradually evolved and expanded.

The final sentence of the quote refers to the evolution of the analytical framework attached to FP. This raises a number of questions, which will be dealt with in turn. First, what was the starting point for FP? Second, what motivated it to be changed? Third, what is the content of those changes?

As is well-known, the initial economic model attached to FP is associated with Polak (1957). The formal details of the model are laid out in Appendix 1, together with the results drawn upon below. The principles involved are relatively simple. First, there is a stable relationship between the supply of money and the level of nominal income determined by expenditure – the more money we have, the more we spend. Second, expenditure can either be made on domestically produced goods or on imports. Third, if imports exceed exports, then there will be a balance of trade deficit, which will have to be covered by an outflow of foreign reserves at the expense of the domestic money supply (and inflow for balance of trade surplus). Fourth, with a new level of money supply established, the whole process can be repeated. One immediate implication is that increases in the domestic supply of credit will lead to an increase in imports and a corresponding outflow of foreign reserves, tending to restore the overall money supply to its initial level. A key element in the emergence of FP is its rejection of the Keynesian assumption that changes in the level of domestic credit can have an impact on net foreign lending via changes in the interest rate. The fundamental idea behind FP is that when monetary expansion from domestic sources exceeds the demand for money, further spending, particularly on imported goods and services, will cause deterioration in the balance of payments via the money supply and international reserves. In a paper that traces the origins of his model, Polak (2001) defines domestic credit as a combination of business investment that is not self-financed or not financed by sales of shares and bonds; consumer spending financed by credit from the banking sector; and, most important, government deficit spending financed by the domestic financial system. Polak (1957, p. 13) perceives the implications of the transmission mechanism in the following terms:

The economic development could have been financed by higher taxes or foreign loans. The factories might have been built by restriction of consumption or by the repatriation of capital. In all these situations, the desire to spend for a particular purpose would not have led to a payments problem. In a real sense, the credit expansion is the cause of payments problem

An important aspect of the model is that it leaves open how the level of nominal income is divided between prices and output. In the purest form of monetarism, subject to random shocks, all markets work perfectly and instantaneously. Consequently, the domestic level of output is at capacity, and the domestic price level cannot change (for a regime of fixed exchange rates as was presumed to prevail at that time) since otherwise different prices would prevail on domestic and foreign markets. So, all increases in domestic credit instantaneously leak out of the economy in the form of loss of reserves. Only a certain amount of money holdings are required by the domestic economy relative to domestic output. The Polak model is not so extreme. Implicitly, it allows for domestic and foreign prices to diverge temporarily from one another and for the division of nominal income between output
and prices to be left undetermined. From the perspective of monetarism, FP either violates the law of one price or the assumption of full employment. Otherwise, nominal income could not change.

In practice, this opens the way for IMF discretion in deciding what the level of output is liable to be for a country undergoing stabilisation. As a conservative judgment is usually made, this leads to austere policies in terms of government expenditure. Ultimately, the IMF prescriptions are based on the capacity to pay for imports, whether from exports of goods or inflows of capital. As shown in Appendix 1, an economy is subject to what might be termed an import multiplier. If it has an import ratio of 25 per cent, for example, then domestic output must be tied to a level at four times the capacity to pay for imports. This is a remarkable result and has generally been overlooked in the representation of FP in terms of short-run adjustment. Set against the long run, in which capacity to pay for imports is the only consideration, the short run is heavily pre-determined and marginal in terms of developmental goals that are otherwise unconsidered.

For Polak (1997), writing in retrospect, the key feature of the model is its simplicity. This, in turn, is motivated by the lack of data other than banking and trade statistics, and the focus upon a single policy variable that could be controlled – the level of domestic credit creation. It might be thought that such a rationale is extremely weak. To deploy a medical analogy, it is as if to treat a patient with a broken leg with penicillin because this is the only medicine available with which to affect temperature, which can at least be measured reasonably accurately. However, turning to the second question listed above of the motives for model evolution, one factor is surely the availability of improved data and policy instruments.

But there are other factors as well. The initial model is highly aggregated. Levels of expenditure, sources of output, flows of finance can all be disaggregated into distinct components, both within and between the public and private sectors. Each of these can be examined on the basis of the influence of a greater range of explanatory factors – introducing the rate of interest, for example, in capital flows and expenditure decisions. In addition, economic theory can be more fully deployed, itself subject to change, to examine the core relationship between nominal income, output and prices at various levels of disaggregation. Finally, the initial model needed to be modified in the light of changed international circumstances and objectives – not least with the breakdown of the Bretton Woods system of fixed exchange rates and the rising incidence of hyper-inflation.

It is not difficult to chart the process by which the initial model has evolved. For Rhomberg and Heller (1977, p. 4):

The demand for money, it is argued, depends on a relatively small number of economic factors, and the effects of economic changes on the demand for money are therefore easy to assess because they can operate only through one or several of these few factors. A similar argument can be made with respect to the determination of the supply of money … The apparent simplicity of the monetary approach to the balance of payments is, however, deceptive. Even for many purposes the demand for money can be conveniently expressed as a function of a small number of variables, it is still just as much the resultant of all the influences that come to bear on the economy as are national income and expenditure. Again, domestic credit, which is often taken as being determined exogenously, may in fact be systematically influenced by factors determining the demand for money or by some of the events whose monetary effects are being examined. These considerations do not invalidate the monetary approach; they merely draw attention to the possibility that it will be seen, on further examination, to be not quite so superior in terms of simplicity of application as had first been thought.

This passage has been worth quoting at length since it shows, from a book entitled The Monetary Approach to the Balance of Payments, issued by the IMF, that there is more than a lingering commitment to the approach even though it is effectively acknowledged that everything in the economy depends upon everything else so that, in principle, there is no rationale for excessive emphasis upon monetary factors. A decade later, there is an explicit distancing from the taint of monetarism and dogmatism, IMF (1987, p. 2):
As will be stressed in the description of the body of theory underlying Fund-supported adjustment programs, the Fund’s approach to program design is eclectic. The paper will, it is hoped, serve to dispel the notion that these programs are all based on a particular view of the economy or on the convictions of a single school of economic thought. That money and monetary policy play an important role in determining balance of payments outcomes, and therefore clearly also in the design of adjustment programs, does not make Fund-supported programs necessarily “monetarist” in character.

Within the next decade, Schadler et al (1995) are reporting the need for more extensive intervention in stabilisation policy because of lags in responses and underlying distortions in economies precluding adjustment. Consequently, conditionality has been extended beyond demand restraint to include supply-side measures. With resistance from some IMF Board members, a research agenda is set for, p. 50:

How the combination of initial conditions, external environment, macroeconomic and policies, and key rigidities in the economy affected the path of saving, investment, and output during the adjustment phase. In light of the forward-looking nature of investment decisions, the study would have to examine the credibility and medium-term consistency of policies.

Recently Khan and Sharma (2001, p. 20) also remark:

In the late 1970s and early 1980s, the IMF was criticised for being interested only in narrow (balance of payments) outcomes and relatively unconcerned about growth. Thus the IMF, in response to calls by its membership, began to include program policies to remove structural impediments to growth and the efficient allocation of resources.

In this light, a number of separate influences can be identified as having influenced the evolution of macroeconomic stabilisation. The first has been to tie the theory more consistently to what can be termed “general equilibrium considerations”. This itself has several components, discussed below. Second, it has been complemented by a neo-liberal supply-side approach (reliance on the market where possible) and, thirdly, by a neo-liberal demand-side stance (austerity in macro-targets). In targeting, in response to structuralist and other criticism, some token sensitivity has been shown towards country-specific conditions with inflation, for example, being reduced in light of historical experience rather than an inflexible and universally imposed level. A tolerable rate might range from something close to zero to 100 per cent. In addition, politically sensitive issues, such as income distribution and state provision must conform with local economic and political constraints. Within such bounds, the Washington consensus has divided macroeconomic stabilisation programs into demand-side and supply-side policies, with the exchange rate falling in between. Fiscal and monetary policies are subsumed under the demand-side, while trade liberalisation, removal of price controls and subsidies and financial and public sector reforms come under the supply-side. External debt management is also included as part of stabilisation programs.

It worth asking why there is a need for stabilisation in the first place? The answer to this question is as follows. The implementation of stabilisation and structural adjustment programs is often justified by the lack of alternatives, or by the assumption that the only other policy option is the status quo ante, which called for adjustment in the first place. The argument goes: a country with a fixed exchange rate and a balance of payments equilibrium may be facing a rate of increase in its prices more than the increase in the foreign price level. This could be due to various reasons including wage inflation, excess monetary expansions, and a fiscal deficit. The consequence is to shift domestic demand towards imported goods while the world demand for exports of the country in question declines. This will result in pressures on balance of payments, particularly the current account balance, which could be financed by borrowing from abroad or running down international reserves. As is apparent from discussion elsewhere in this paper, orthodox adjustment policies base their case for reform on government failure, associated with the pre-adjustment economic reforms adopted by most developing countries. These might have involved regulation of prices, leading to loss of international competitiveness; exchange controls, which leading to illegal transactions; import-substitution policies, focused on encouraging domestic manufacturing capability through import controls; overvalued
exchange rates; binding ceilings on interest rates; and a heavy dose of public ownership. The argument is that these policies depended upon state administration and intervention, which turned out to be an avenue for self-interest.

Given this perception of the pre-reform scenario, there are two stylised policy strategies. First, is for developing countries to pursue a strategy of exchange control and quantitative restrictions to suppress the demand for imports and, at the same time, lessen the pressure on reserves. This, according to proponents of IMF stabilisation programs, results in inefficient rent-seeking; over-invoicing and under-invoicing of imports and exports, respectively; smuggling, exaggerated tourist expenses; overpayments for overseas obligations; and errors and omissions in trade statistics. Quantitative restrictions also, result in severe shortages of vital inputs such as petroleum, machinery and fertilizers, Krueger (2000). The second (in these terms, essentially the only reasonable) strategy, favoured by advocates of IMF stabilisation, is the deflationary option: Using monetary, fiscal and exchange rate policies the demand for imports can be restrained and the pressure on reserves relieved. Earlier studies of IMF stabilisation programs outline the conceptual framework and show how demand-side policies can be used to restore equilibrium between aggregate demand and aggregate supply. The central premise of the deflationary option states that the rate of growth of aggregate demand needs to be consistent with the rate of growth of aggregate real supply plus net capital flows from abroad. If the economy runs a rate of growth of demand in excess of the rate of growth of real supply of output, the price level and the deficit in the balance of payments increase. Hence, dictated by FP, equilibrium is sought via measures that restrain aggregate demand and/or stimulate aggregate supply and stabilise the economy in the short run and stimulate growth in the medium to long term. Under stabilisation, the policy targets are the inflation rate, the balance of payments and economic growth. The instruments include domestic credit, the exchange rate and the interest rate. Any subsequent deviation from target variables, therefore, indicates external or internal disequilibrium: the former being the disequilibrium between imports and exports, that is, the current account deficit; and the latter the imbalance between government spending and revenue, the budget deficit.

Some of the general equilibrium considerations, taking the simple form of accounting identities, have been prominent in the design of stabilisation policies, especially for those countries with high inflation rates, an overvalued exchange rates and excess domestic credit, particularly to the public sector. Crudely put, the policy implications are to devalue the nominal exchange rate to achieve export competitiveness, restrain domestic credit to control inflation and simultaneously achieve real exchange rate depreciation. If this succeeds, there will be an improvement in current account deficits as exports rise and imports fall. In the conventional model, an internal disequilibrium caused either by a shortfall in savings or tax revenue is reflected by a disequilibrium in the current account and vice versa. Shortfalls in savings (due to a high level of consumption) can be financed by external borrowing, but no capacity is created to pay back. On the other hand, if external borrowing is used directly to finance investment, it is sustainable if the marginal returns from it exceed the cost of borrowing. Those responsible for stabilisation have generally pessimistic judgements about the capacity of developing economies to generate such a return in the short term. Specifically, external borrowing above assumed sustainable levels is not an option in stabilisation programs, simply because reduction of debt burden itself has become an overriding objective. Therefore, the short-term feasible policy in the typical stabilisation program is to reduce aggregate consumption and investment, commonly referred to as aggregate demand or absorption.

The debate on stabilisation policies rests on identifying the primary causes of spiralling inflation and balance of payments disequilibra. The orthodox response to inflation is to reduce aggregate demand. Under the assumption of the law of one price, a fall in aggregate demand leads to a decline in the price of non-tradable goods and services. It follows that prices of tradable goods and services rise relative to non-tradable, leading to a resource shift into export and import-substituting sectors. Devaluation facilitates this process while higher interest rates raise savings and capital inflows. Whether inflationary pressures and deficits in the balance of payments stem from monetary expansion, supply shortages or price expectations, therefore, determine the policy measures undertaken. To control inflation and the deficit in the balance of payments, fiscal and monetary policies are recommended. Fiscal policies are designed to raise the proportion of public revenue to GDP but also to reduce the ratio of expenditure to GDP. Monetary policies, on the other hand, involve restraining domestic credit to the public sector, both to reduce absorption and release resources to the private sector to avoid so-called “crowding out”.

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To a large extent, as identities, the above aspects are independent of the theoretical content with which they are endowed, even if, in practice, it has often been simplistic. Even so, such accounting identities are not entirely analytically neutral, despite being tautologous within their own frame of reference, for they do incorporate a particular structural understanding of the economy depending on how the latter is disaggregated into separate components that are added together to form the identities. In addition, they necessarily suppose that certain variables are contemporaneous with one another, since they have to be added at one and the same time. Thus the use of identities in stabilisation theory presupposes assumptions about both structuring and sequencing between variables. Such issues are of paramount importance, but they tend to be overlooked as conventional wisdom as model building becomes standardised and adopted unquestioningly.

As noted above, although we are led to believe in the advent of a new “consensus”, the content and objectives of stabilisation and adjustment policies have not changed since the rise of the neo-liberal agenda in the 1970s. According to Williamson (2000, pp. 252-53), the elements of the Washington consensus remain: a) fiscal discipline; b) redirection of pubic expenditure priorities towards health, education and infrastructure; c) tax reform, including the broadening of the tax base and cutting marginal tax rates; d) interest rate liberalisation; e) competitive exchange rate; f) trade liberalisation; g) liberalisation of inflows of foreign direct investment; h) privatisation; i) deregulation (to abolish barriers to entry and exit); and j) secure property rights. Mussa and Savastano (1999) also summarise the objectives of IMF inspired programs as securing sustainable external financing; adopting demand restraining measures consistent with available financing; and proceeding with structural reforms to promote growth and adjustment in the medium and longer term.

Thus, the above two policy options are complemented by supply-side measures, which stem from the assumption that economies need to adjust to eliminate distortion from general equilibrium. For instance, agricultural price controls mean that prices do not reflect cost of production and create a disincentive to agricultural production. This leads to mis-allocation of resources, shortages of agricultural produce, decline in agricultural production, urban migration and environmental degradation. Thus, pricing and marketing policies include liberalisation of product marketing, retail and producer price increases, adjustment in utility tariffs and liberalisation of prices, particularly in the agricultural sector. Other supply-side policies include public enterprise policies targeted at civil service salaries and employment, improving management, and control of administrative expenditure as well as privatisation, and phasing-out and liquidation of state-owned enterprises. Widening the tax base and improving revenue collection are also part and parcel of supply-side policies. Investment programmes are directed to directly productive sectors with emphasis on small- to medium-scale agriculture and industries financed mainly by domestic private investment and foreign capital.

The deregulation of capital markets is primarily tackled through measures to reform the financial sector and improve the overall process of financial intermediation. The main instrument of reform is to increase the nominal rate of interest, normally accompanied by measures to raise overall credit available to the private sector, for example through the reduction in bank reserve requirements and ceilings on the borrowing capacity of the public sector. The assumption is that repressed interest rates do not reflect the true cost of borrowing and lead to low levels of resource mobilisation as savers prefer to hold real rather than financial assets, make unproductive investment or send savings abroad, IMF (1987). The argument for interest rate adjustment in the financial sector draws on the conceptual foundations laid by the “financial repression models” of McKinnon (1973) and Shaw (1973); in essence, the approach suggests that allowing real rates of interest to rise to their market clearing level induces higher savings and more effective investment, by raising the latter's average efficiency with the crowding out of low-yielding investment projects.

Trade liberalisation targeted at removal of disincentives to exports is prescribed to restore the external balance, as well as on the grounds of efficiency and welfare gains. As regards the trade regime, reforms usually include the adoption of a low, uniform tariff structure that provides equal effective protection to all producers of tradable goods and the elimination of quantitative restrictions; tariffs tend to be described as preferable to quantitative restrictions, because the latter insulate domestic producers from world market conditions and stimulate rent-seeking and Directly Unproductive Profit-Seeking behaviour, (DUP), Krueger (1974) and Bhagwati and Srinivassan (1980).

Exchange rate policies have a dual purpose. It is postulated that devaluation leads both to expenditure-switching and to expenditure-reduction. The expenditure-switching works through altering
the price of tradable relative to non-tradable goods. More specifically, devaluation is advocated in order to lower the foreign currency price of exports and raise the domestic currency price of imports, thus encouraging production of export commodities and import substitutes. On the other hand, expenditure-reduction is assumed to work through an increase in import prices and hence a fall in real wages, in which demand for imports falls and reserve holdings improve (the real balance effect). The additional objective of devaluation is to unify official exchange rates with parallel rates to curb unofficial transactions.

Reduction of stock of debt to levels where the debt-servicing capacity of a country is obtained, the clearing of arrears, also forms part of the policy package. The objective is to achieve a sustainable external debt management in program periods. Sustainability refers to use of borrowed resources from external sources or simply savings of non-residents to the extent that exports are able to pay the debt without reductions in import requirements. In other words, real interest rates paid on debt must not exceed real rates of growth of exports, IMF (1987).

4. CRITICS AND THE WASHINGTON CONSENSUS

Such is a brief overview of the logic underpinning stabilisation under FP and neo-liberal adjustment. It has met with wide-ranging criticism in policy making as well as international academic circles. Kapur (1998, p. 115) wryly observes that:

> If the IMF had a dollar for every criticism of its purpose and role by the Right, the Left, and the Centre, it would perhaps never again have to approach its shareholders for more money to sustain its operations.

According to Radha (1995), critics of stabilisation and adjustment programs can be classified into four groups: the “eclectics”, the “structural adjustment with a human face”, the “dependency theorists” and the “structuralists”– these ranging in style from analytical critiques of theoretical inconsistency to polemical persuasion. In summary, the main thrust of such critiques is that, p. 557:

> Stabilisation and structural adjustment policies, largely based on the neo-classical economic rationale, were justifiable neither in terms of the analytical nor the historical literature.

The main issues raised by the critics can be summarised as follows. First, the old consensus assumes that macroeconomic disequilibrium, particularly economic difficulties in SSA, for instance, is caused by internal or domestic policy errors. The implication is that external disequilibrium is the result of internal policies that allowed aggregate demand (absorption) to exceed aggregate output or income. The orthodoxy treats external causes such as decline in the terms of trade or changes in international monetary policy as bearing limited responsibility for macroeconomic imbalances. Declines in the growth rate of low-income adjusting countries are associated with recession in developed economies and liberalisation of trade. It has been found that during periods of recession, high-income economies experience terms of trade improvement as a result of the decreased foreign currency price of importables, Mukhopadhyay (1999). The response to this criticism is that the existence of external factors does not mean there is no need for domestic adjustment. External economic factors are part of the benign and malignant of economics. The emphasis on internal factors is because these are under country influence and eligible for financial assistance.

Second, much of the critical literature focuses on the consequences of reducing aggregate demand and the burden of contraction in absorption. As Dell (1982, p. 599) notes:

> [A] permanent solution to the problem of cost inflation cannot be obtained by seeking to play on the fear of rising unemployment among those who try to protect themselves against increases in the cost of living by demanding higher wages.

Elsewhere, he adds, p. 608:

> Demand deflation, if taken far enough, will ultimately have an impact on cost inflation - there is no dispute about that. What is in question is the need for the heavy social and economic costs that are involved.
FP models do not consider the effect of credit expansion on the real economy. The policy of higher interest rates to restrain the demand for credit may result in shortages of working capital and a reduction in investment and output as well as a rise in the price level. According to Tarp (1993, p. 63):

It is clear that no account is taken of the fact that credit expansion may be linked through policy with investment and capital accumulation, which might have positive effects of their own.

Similarly, the objection to austere stabilisation programs, particularly the reduction in public expenditure, has been that it has no human face: the impact is felt on public investment rather than private consumption and is disproportionately disadvantageous to those in poverty. Public investment in health, education and food subsidies has major implications for poverty Cornia et al (1987). A fall in domestic credit, particularly to the public sector, also works against "crowding-in” the private sector as investment on infrastructure is reduced. Another important issue is the effect of stabilisation on income distribution. As Addison and Demery and (1987) rightly ask, what is the time span for short-term deflation to be offset by long-term growth? And do the same groups affected by the costs of short-term adjustment gain in the long-term? Dell (1982, p. 598) points out that:

A budget deficit per se tells us nothing about whether aggregate demand is excessive or not. It is only when we consider the budget deficit in conjunction with other demands on private saving - namely gross investment and net exports - that we can tell whether aggregate demand is excessive ... One must distinguish between that part of a budget deficit which is an automatic response to the low level of business activity, leading to reduced government revenues and higher government transfers, and the rest of the deficit which could add to demand even at a higher level of employment.

In response, the IFIs, particularly the IMF, have argued that public expenditure reviews focus on the quality and composition of the budget rather than simply the quantity of the budget deficit, Tanzi (1989 and 1994). Although, reducing unproductive expenditures is highly influenced by political considerations, current emphasis is on expenditures that do not result in improved provision of basic human needs, such as military expenditure, subsidies that favour certain social classes, and expansion of public employment at the expense of private investment on infrastructure is reduced. Another important issue is the effect of stabilisation on income distribution. As Addison and Demery and (1987) rightly ask, what is the time span for short-term deflation to be offset by long-term growth? And do the same groups affected by the costs of short-term adjustment gain in the long-term? Dell (1982, p. 598) points out that:

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[T]he IMF starts with the truth that budget deficits should remain small in order to preserve macroeconomic stability. Then it demands budgetary austerity of impoverished countries to the point where those countries can’t even keep their poor alive—so depleted are the budget resources for public health, food transfers to the poor, and the like. In addition, the IMF has repeatedly insisted on debt servicing that exceeds the combined spending of the health and education ministries. And yet, when the world complains about the disasters of IMF conditionality, the IMF’s response is that the protestors are obviously macroeconomic illiterates.

Third, regarding long-term growth, primary commodity production and objectives such as technological learning, human capital development, industrial development and regional trade (which require increased public expenditure and co-ordination) are incompatible (export pessimism), Stewart (1992). Long-term diversification objectives can only be achieved by designing technology policy, improving organisational, marketing skills and human development, which the market cannot guarantee, Wangwe (1994).

Fourth, there exists a critical literature which argues that: 1) the assumption of the law of one price is suspect; 2) inflation-cum-balance of payments problems are inherently related to the structure of production and distribution in an economy; and 3) the response of primary exports needs more than relative price changes. Policies such as investment programmes and targeted subsidies must be considered. Therefore, policy prescriptions must fully capture bottlenecks and rigidities in the process of production and consumption. Demand restraint in the short term can lead to a fall in output, investment and capacity to generate foreign exchange in the long term. Taylor (1988, p. 20), for instance, notes:
What usually happens under a demand-reduction programme is that the price mechanism is short circuited. The cut-back in real purchases make production fall, cutting import needs directly ... Indeed by holding down domestic investment, austerity may make repatriation of foreign incomes unattractive, as seems to be the case in Sudan.

Critics also highlight the negative effects of policies such as devaluation and restraint in the expansion of domestic credit. Devaluation leads to stagflation as demand for imports tend to be inelastic for most industries and agriculture. Dependence on imported capital and intermediate goods as well as fertiliser inputs is not recognised. Initial increases in production costs in non-tradable sectors might reverse desired outcomes, which are increases in prices of tradable goods relative to non-tradable goods, Katseli (1983). Alternatively, prices of non-tradable goods might also increase by same proportion as devaluation if wages are fixed or indexed to consumer prices. If a sector is import-dependent, in the short-term, the effect of devaluation might also be reductions in exports. Supply response to devaluation depends on the characteristics of commodities (crops or minerals), Loxley (1990). The timing of devaluation is also critical since tree-crops and minerals depend on harvest and gestation periods. The implication is that structural characteristics determine adjustment outcomes. The political sustainability of reductions in urban real wage in countries where they are already at a minimum is also questionable, Helleiner (1983).

The assumption behind expenditure-switching and expenditure-reduction policies is that exports and imports are responsive to prices so that capital and intermediate goods could be substituted without causing disruptions in investment and output. According to the elasticities approach, for a devaluation to improve the current account, the Marshall-Lerner condition must be satisfied; the sum of the elasticities of demand for imports and exports needs to be greater than one. However, critics argue that constraints on export expansion in low-income countries, for example, are not only prices but also income and other structural bottlenecks. For instance, it has been shown that external demand determines primary commodity exports rather than relative prices. With the adoption of common stabilisation programs - hence devaluation by a majority of identical commodity producer countries - there is danger of a fallacy of composition effect, Weeks (1995). Lack of vital inputs such as fertilisers, transport infrastructure and foreign exchange also make supply of exports price-inelastic.

The idea that devaluation releases exportable goods from local consumption and prevents imports from competing with locally produced goods has been questioned because of limited substitution between tradable and non-tradable goods, particularly in developing economies. Moreover, increases in import prices and consequent fall in absorption could have a negative effect on investment, output and prices as domestic capital and intermediate sectors are underdeveloped and dependent on imports such as machinery and spare parts. Some influential theoretical studies have also shown that devaluation has serious distributional implications as propensities to save differ between low-income urban wage earners and high-income profit earners, Krugman and Taylor (1978). Devaluation also increases foreign currency denominated external debt undermining public sector fiscal finances.

The use of the exchange rate as an expenditure reducing policy interacts with the policy of domestic credit restraint. In a monetarist model, devaluation increases domestic price levels vis-à-vis a rise in local currency price of imports. Assuming a constant supply of money, with the demand for money purely a function of income and price, increases in domestic price levels raise the demand for money. This means, without an increase in domestic credit, money market equilibrium could only be achieved at a lower level of real income. Therefore, stabilisation packages, which include a simultaneous domestic credit restraint and devaluation, will result in double deflation.

And finally, and perhaps most important, critics question: why did trade protection, industrial policy, and subsidized credit work in East Asian countries? How did the governments of these countries manage to avoid the rent-seeking activities (or their negative effects) that result from interventions, Rodrik (1996)? For instance, it is clear that new theories of trade, which describe international markets as imperfectly competitive and which focus on economies of scale and technological rents, have not influenced the design of adjustment programs. These models have very different policy implications from those of the neo-classical theories advocated in adjustment programs.
5. INTERROGATING THE LONG RUN OR TO WHAT ARE THE IMF AND WORLD BANK ADJUSTING?

To a large extent, much of the previous discussion reflects disputes over the efficiency and goals of short-run macroeconomic management and corresponding analytical perspectives, with some presumption that all will turn out well in the long run if the short run is managed appropriately. Such Micawberism has, however, been increasingly eroded not least, no doubt, due to the lengthening period over which successive stabilisation programs have been experienced collectively and by individual countries. Further, the emergence of both Structural Adjustment Facility (SAF) and the Enhanced Structural Adjustment Facility (ESAF, renamed PRGF) brought the conventional distinction between the IMF and the World Bank into question. Structural adjustment after the Berg Report in 1981 was a terrain left to the World Bank while short-term stabilisation belonged to the IMF. The conventional distinction between the former’s role as a development and project lender and the latter as financier of balance of payments is no longer applicable. As Bird (1995, p. 70) questions, and as far as development is concerned, “where does one end and the other begin?” In recent years, the functions of these institutions began to overlap. While the IMF began to reiterate structural concerns the World Bank began to emphasise the importance of macroeconomic stabilisation for the success of its programs, Mosely et al (1995). And, according to Killick (1995, p.76):

It could also be seen as a Fund response to the movement by the World Bank into the area of macroeconomic policy, with the growth during the 1980s of its structural adjustment lending; and the increased growth of the debt problems in the early 1980s, with an associated emergence for the first time of a problem of countries falling into arrears in servicing their past IMF credits.

In short, the issue of stabilisation demands a response to the question “around what?” Other than as an answer in terms of (balance of payments) equilibrium, it is remarkable how little attention the IMF has devoted to this issue. It is as if looking at the short run inevitably takes care of the long run - a sort of pennies and pounds philosophy applied to the balance of payments and extrapolated to the economy as a whole. This neglect is all the more telling since criticism of stabilisation has often focused upon the damaging effects of deflationary policies on current output and investment, the latter representing a key link to future growth, quite apart from the erosion of socio-economic infrastructure and stability.

However, the issue of the long run has not been entirely overlooked by the IMF. In their attempt in the IMF Staff Papers to address the link between macroeconomic stabilisation and longer-term economic growth, Khan and Montiel (1989) sought to construct “a conceptual framework” for “growth-oriented adjustment programs”. This is undoubtedly a worthy goal. For a major criticism of stabilisation policies, however valid they might be in theory and practice, is their failure to assess their longer-term impact on growth, particularly in view of their frequent short-run deflationary impact. Khan and Montiel explicitly seek to bring together the growth model of the World Bank - the Revised Minimum Standard Model (RMSM) - and the Polak model or FP (FP) model associated with the IMF. In a comment, Polak (1990) refers to a “marriage” between the two models, a term that is accepted by Khan and Montiel (1990) in their response.

For Khan et al (1990, p. 156) the motivation for the merging of the FP and RMSM models, which support the lending activities of the IMF and the World Bank, is “because of the potential operational relevance – a starting point for the design of more realistic developing country models that deal with adjustment and growth.” The attempt to marry the two models rests on the premises: 1) the models are complementary and can be merged to formulate a general framework for linking the external sector with the real sectors of an economy; and 2) the task is straightforward as the FP focuses on monetary variables and the RMSM on real variables. Khan et al (1990, p. 172) also state that the model can be used for “adjustment with growth” policy formulation, given the merged model’s instrument and target variables: “given chosen values for the target variables (price, output, reserves) two of the policy instruments (domestic credit and the exchange rate) can be chosen arbitrarily and the model will then determine values for the endogenous variables and the three remaining policy
instruments. This is the model’s ‘programming’ mode”. The policy implication of the merged model is the same as the standard FP framework. In the short run ceilings on the level of domestic credit and devaluation will stabilise inflation and the balance of payments. This process is complemented by improved tax revenue collection and reduction in government deficit. From this policy exercise, however, it is not clear where and how the RMSM features. The merged model’s instrument and policy variables as well as its policy conclusions are the same of that of FP, which means that the short-run stabilisation content of the model is still dominant with no growth dynamics provided. Khan et al ignored the emphasis of the merged model on the short run and focus on other limitations, for instance, the exclusion of an analysis of the interest rate and wages. However, the authors also claim an inclusion of such variables complicates the model, for which simplicity is one important attribute.

The nature of the union, however, can be looked at from a number of perspectives. For Khan and Montiel, there is a clear analytical attraction and synthesis. RMSM is a two-gap model in which the level of foreign exchange that can be financed determines the potential level of output (growth). It does, however, take the price level as exogenous. On the other hand, FP is a model which determines the changes in the balance of payments and the level of nominal income, with the latter's division between real output and price left open for policy speculation. Consequently, each model can be closed in the mathematical sense by the contribution made by the other. RMSM determines output for FP, and FP determines prices for RMSM. As it were, irrespective of the conceptual basis of the two models, and since they have variables in common, they are mathematical complements.

A second feature of the merged model is to combine the short run of the FP with the long run of the RMSM. As already hinted, a third, closely related but separate feature is to link short-run macroeconomic equilibrium with long-run growth. It is, however, the burden of this section to establish that the outcome of the exercise is entirely unsuccessful despite exaggerated claims to the contrary. The short-run features of the framework are entirely dominant. Indeed, as will be shown below, no growth model emerges at all, with the RMSM functioning purely in the first respect listed above, as a means of closing the short-run FP model.

To some extent, this consequence of the marriage is cloaked by the formal terms in which Khan and Montiel construct their analysis, which is technically inelegant. They employ discrete rather than continuous time. Further, they only examine the changes after one period of time, p. 281, “[T]he model assumes continuous equilibrium; because the model is specified in discrete time, all adjustments take place in one period”. Of course, equilibrium at all times does not necessarily mean that all adjustment takes place in one period. As long as there is a distinction between short- and long-run equilibrium, the model would generate a path of the one around the other. By collapsing all adjustment into a single period, Khan and Montiel are essentially extinguishing the distinction between the short and the long run. Moreover, it cannot be presumed that what happens in the first period is representative of the impact upon the long-run growth path. For example, in the standard neoclassical one-sector growth model, consider a reduction in the rate of saving and a corresponding increase in the level of short-run consumption. Whether this is reproduced in the long run depends upon whether the initial saving rate was above or below the golden rule level (equal to the growth rate). For, if the saving rate is unreasonably high, the level of consumption can be increased in both the short and the long run by decreasing saving. Otherwise, at a saving rate below the golden rule level, there is a genuine trade-off between present and future consumption. In any case, it is readily apparent in the Khan and Montiel model that it is the long run that suffers the fate of being dead in the short run, so skewed is the analysis towards the short run, see Appendix 2.

The results of the analysis can be briefly summarised. First, despite claims to the contrary, the merged model proposed by Khan and Montiel does not combine the short and long runs to provide a theory of growth and adjustment. Second, this is because long run, stable growth is precluded in their own version of the marriage. Third, the resulting pre-occupation with the short run is unduly pessimistic with the scope for adjustment (through policy-inspired parameter shifts in factor productivity and balance of trade, for example) being unscaled relative to output and, hence, increasingly limited automatically as growth occurs. Fourth, if the model is amended to allow for the possibility of steady-state balanced growth, it generally leads to unstable outcomes unless holdings of foreign reserves start or adjust by chance to the right proportions, or unless the monetary authority has the capacity both to identify the long-run growth path and to adjust to it directly. Finally, this implies that the table of results produced by Khan and Montiel, connecting shifts in exogenous and policy variables to adjustment in one period are either totally meaningless or totally unnecessary. In case of
imperfect monetary policy and instability, first period shifts do not necessarily indicate subsequent direction of movement, nor changes in the underlying growth path, if any. For a perfect monetary authority, adjustment is irrelevant; it goes straight to the appropriate growth path.

Thus, the model presented by Khan and Montiel does not satisfactorily address the long run. It is worth highlighting the economic assumptions on which it is based which tend to be obscured by the complexity of the algebra and their being mingled with accounting identities. There are saving, demand for money, production and balance of trade functions, all of which are extremely simple. It hardly seems that an apposite model of the long run could emerge from such a simple framework, let alone address the short run and the articulation between the two. It is absolutely incapable of addressing the fundamental policy issues of how to generate productivity increases and sustain international competitiveness. How the corresponding causal factors are situated relative to the short and long run is also necessarily absent. Further, as in all steady-state, long-run growth models, shift in the composition of output to reflect modernisation, industrialisation, or whatever, is inevitably absent even though this is the one concession that Agénor and Montiel (1996) make in constructing a specifically development macroeconomics, on which see below. Presumably, such sectoral and socio-economic transitions can be left to microeconomics and market forces.

In many ways, the limitations of the marriage model revealed here are formalisations of Polak's (1990) misgivings, reiterated in Polak (1997). For him, the model of FP is only appropriate for examining the short run in stylised circumstances, to correct balance of payments rather than to target other objectives such as growth, and to leave the level of output to be assessed through iterative judgment rather than from formal modelling, especially from the RMSM that has been constructed for entirely different purposes. Indeed, in a personal communication commenting on the model developed here, Polak suggests:

> My view is that (the marriage) is not a worthwhile project, and each subject should be approached on its own, provided the practitioners are fully aware of any recommended policies on the other objective (which to be sure has not always been the case between the Fund and the Bank). A possible simile, somewhat limping of course: the jobs of a schoolteacher and a pediatrician are both to do good to a child, and each should be aware of the other … but the professions should remain specialised for greatest efficiency in each field.

But what is true within his analogy surely does not hold for the stabilisation and growth of an economy where the short and long runs are intimately and directly connected to one another. Khan and Montiel (1990) interpret Polak’s critique as demanding a more complex marriage between the two models. Add more variables, disaggregate more, or introduce more behavioural relations. For example, they suggest that output could be made responsive to prices in the short run rather than dependent upon the build-up of capacity through saving and investment. In similar and cavalier fashion, Khan et al (1990) assert that their analysis can be made more realistic by introducing more endogeneity into their model, through a variable ICOR and investment function, p. 166, and through a more complex monetary sector and lags in price and wage adjustments, p. 176 and p. 167. They pride themselves on having made the model available in view of, “the combination of widespread interest in Bank-Fund programs and the scarce existing literature on the methodology employed”. They confess, “that the simple model plays an important role when it comes to the quantitative macroeconomic analysis”, p. 177. They explain the survival of such simple models on the basis of their limited informational requirements that can be, “supplemented by both qualitative and quantitative judgments ... to work well in predicting outcomes for the principal macroeconomic variables”, p. 178. Consequently, Khan and Montiel (1990, p. 191) feel able to close their debate with Polak as follows:

> The model ... can serve as a basis for the development of more realistic models that capture the complexities of growth and adjustment, if only by focusing the discussion on precise identification of the model's shortcomings, thereby permitting superior, but equally policy-relevant, alternatives to emerge.

These claims are nothing short of outrageous and monstrous for a model whose internal properties are such as to generate zero or unstable growth!
6. CONCLUDING REMARKS

Despite considerable ingenuity and change in analytical content, the stabilisation framework has remained riddled with inadequacies that are transparent to those who are prepared to look. For those inadequacies can be and have been revealed even on the theory’s own terms or within its own methodologies. Consequently, the critical account offered here is based in large part upon reference to the work of those, relatively few in number, who have been prepared to engage in more circumspect assessment of the standard material. Necessarily, an account of this sort does depend upon the use of standard terminology and concepts. These may be particularly mystifying to those studying macroeconomic stabilisation from the vantage point of other disciplines. However, the central message that is being delivered here is that the technical and statistical wizardry of FP macroeconomics, intimidating in itself, is based upon the most nebulous of analytical foundations if, indeed, there are any foundations at all that are able to stand up even to the most cursory critical scrutiny. Those willing to challenge the theory from a more radical methodology than its own, even one which would be far from radical within other social sciences, can point to the following fundamental features: its obsession with monetary variables; its dependence on market perfection as an organising concept, the artificial division between the short and long run; and the equally sharp and artificial division between exogenous and endogenous factors. In addition, the understanding of the processes of development are themselves heavily subordinated to a macroeconomics that has been developed, however appropriately, for and in the context of developed countries.

In this respect, structuralist models are also inadequate, and subject to neoclassical incorporation, to the extent that they take as given and model what are perceived to be fixed features of a developing economy. On the positive side, they do place a focus upon some Keynesian and structural aspects that are liable to be damagingly overlooked by more orthodox approaches. Yet, their treatment of the relationship between short and long runs is equally problematic, not least because the economy tends to be perceived as a distortion from that constructed by the orthodoxy. Indeed, the latter often results as a special case of the structuralist account for an extreme choice of parameter values - in degree of monopoly, wage level or whatever.

It is all very well criticising the inadequacies of available models but what are the alternatives? Here, we would make a number of points. First, development and growth are the consequence of the pursuit of underlying economic and political interests. Second, these are structured in particular ways both through the state and through the market. Third, they are subject to tendencies such as monopolisation, industrialisation, urbanisation, and proletarianisation. Fourth, these give rise to conflicts whose resolutions cannot be predetermined. Fifth, taken together, these features impart particular features and dynamics to individual countries for which general modelling is inappropriate even if supplemented by country-specific parameters and judgement. Last, this is both to appeal for country-specific studies and to recognise the limitations of any modelling, however progressive. At most, it captures limited features of what is involved whilst necessarily setting aside those features that it does not cover and presuming they remain “exogenous”, the modern parlance in the economist's toolkit for *ceteris paribus*.
APPENDIX 1: THE POLAK MODEL FOR FP

The standard interpretation of the Polak model is to suggest that it determines money income but leaves its component parts, prices and real output, undetermined. Imports, Z, are lagged one period so that \( Z_t = z + mY_{t-1} \), where \( Y \) is national income and \( z \) and \( m \) are parameters. Also \( M_t = kY_t \), circular flow of income generated by level of money injection, where \( M \) is overall supply of money to the domestic economy; and \( M_t - M_{t-1} = X_t - Z_t + F_t + DC_t \), where \( F \) and \( DC \) are increases in foreign inflows and domestic credit, respectively, and \( X \) is exports. Hence, \( kY_t - kY_{t-1} = (X - z + F + DC) - mY_{t-1} \), where terms in brackets are assumed to be exogenous (and their time subscripts have been dropped). For equilibrium, \( Y_t = Y_{t-1} \), and \( Y = (X - z + F + DC)/m = A/m \). Note, \( X, z, F \) and \( DC \) all have the same effect but for sign.

An import multiplier determines equilibrium income and, if \( Y \) is given at full employment or trend, then this serves to determine long run equilibrium price. For adjustment, with \( y_t = Y_t - Y \), i.e. deviations from equilibrium, then \( ky_t = (k - m)y_{t-1} \). Thus, \( y_t \) converges to zero (if \( k > m \)). If in the short run, \( y_t > 0 \), say because of an increase in domestic credit, then imports will be too high and foreign reserves will flow out, with some of the extra demand taken up in prices and some in output if there is some excess capacity. Ultimately, the long run equilibrium will have been reached with the extra imports in the meantime having been paid for through a loss in reserves. This will also have reduced the real domestic money supply to its appropriate level.

One way of looking at the (Chicago) pure monetary approach is to see all of this occurring instantaneously, rather than over time. The economy is always at full employment. Increase in domestic credit, with a fixed exchange rate, cannot go into higher prices since these would then be higher than world prices and money would flow abroad to purchase. Consequently, the increase in the domestic money supply is matched by an immediate equal and opposite outflow of reserves. In other words, the domestic money supply is effectively fixed by world prices, the exchange rate, the level of output and the velocity of circulation. Any excess flows abroad. This also makes clear that the Polak version implicitly rejects the law of one price (if nominal income rises through prices in the short run) or fixed output (if it rises through output), and differs from the monetary approach in these respects.

APPENDIX 2: FP AS SIMPLE KEYNESIANISM

In the refinement of the FP model, Polak and Argy (1971) do not lag imports and present a more complex and general model, one which endogenises many of the variables by making them interest-rate dependent. Using their equation numbers but our notation, and modifying parameter symbols slightly:

\[
\begin{align*}
(9) \quad Y &= C + I + G + X - Z \\
(10) \quad C &= cY \\
(11) \quad I &= A - br \\
(12) \quad Z &= zY \\
(13) \quad F &= V + gr \\
(14) \quad hr &= kY - M \\
(15) \quad B &= X - Z + F \\
(16) \quad M_t - M_{t-1} &= B + DC 
\end{align*}
\]

This reverts to the original model (Appendix 1) when \( g = 0 \) (foreign flows are exogenous), \( b = 0 \) (investment ditto), and \( h = 0 \) (money demand is interest-elastic). Note that equations (9) - (12) give us the traditional Keynesian IS curve; (14) is the LM curve; and (12), (13) and (15) make up the BP curve.
This model is simply orthodox Keynesian macroeconomics applied to developing countries! It is recognised as such, p. 7:

The model ... contains the major behavioural features to be found in macromodels of the industrial countries.

The only novelty is to be found in equation (16). It provides some dynamics for the model. This is justified as follows, p. 3:

*For reasons of simplicity*, this model makes no explicit allowance for reaction lags. (emphasis added).

But the only lag in the model is from (16), and this is presented as an important economic relationship (although it does imply that other variables will be lagged on their past values but only from their impact through this lag). Lack of other lags is presented as an analytical convenience. But lags in any of the other equations are just as likely in principle - it takes time for one variable, consumption C say, to respond to another, variable, Y say, whether this be for behavioural or for institutional reasons. These assumptions about lags are not about analytical convenience alone; they strongly reflect how we think the economy operates and how quickly we think some variables respond relative to others. We have to wait one period for our balance of payments to adjust the money supply, but everything else adjusts within the period or, as it were, instantaneously. As should be clear later on, if not already, a different lag structure will not affect the long run equilibrium as this is cast in stone by IS/LM/BP, equations (9)-(15). As before, the long-run equilibrium is for nominal income, with prices presumably falling out as a result of real output being given at the level of full employment.

Both mathematically, and hence in economic terms, then, heavy emphasis is being placed on stabilisation through adjustment in the money supply. This is particularly so as Polak and Argy only examine the impact of a one-period change (together with the comparative statics of the long-run equilibrium - their equations (17)-(20). Their method for doing so is clumsy and antiquarian. It is much easier, as always, to examine deviations from equilibrium (which determines $Y^*$ and $M^*$, as the money supply adjusts over time through international flows of reserves). Long run equilibrium is given by (9)-(15) and $M_t = M_{t-1}$. From (9)-(12) and (14), simple algebra gives:

$$Y(1 - c + bk/h + m) = A + G + X + bM/h \quad (A)$$

The inverse of the second term on the LHS is a Keynesian multiplier supplementing the standard import multiplier with leakages into money demand (the higher is k/h, the higher is the impact on the rate of interest of an increase in the transactions demand for money - from (14) - and the higher is b, the greater the depressing effect on the investment level - from (11)). Similarly, for the last term on the RHS where bM/h enters like autonomous expenditure, the higher b/h, the larger investment from an increase in the money supply (the more interest falls from (14) and the more the response from investment from (11). Note that this income determination is for domestic equilibrium and holds instantaneously as a relationship between income and the current level of the money supply. In this respect, it is similar to the earlier, simpler model - just set all the parameters equal to zero except b, k and h (which cancels to give $kY=M$).

From (12)-(16), we can determine external balance. It involves a flow of reserves to compensate for the balance of payments, with corresponding change in the domestic money supply in the following period.

$$M_t - M_{t-1} = X - mY + V + gkY/h - gM/h + DC \quad (B)$$

For equilibrium, i.e. the hypothetical values of $Y$ and $M$ for which there is no movement of reserves/money supply, the LHS = 0:

$$Y(m - gk/h) = X - gM/h + DC \quad (C)$$

This time, on the LHS, the multiplier for $Y$ reflects capacity to pay for imports, worse the higher is $m$ but assisted by capital flows from higher interest rates ($gk/h$ from (14) and (13)) and, on the RHS, $Y$ is higher the lower is $M$ (lower capital in-flow via $g/h$ also from (14) and (13)).
The long-run equilibrium, giving \( Y^* \) and \( M^* \), must satisfy both (A) and (C). \( Y^* \), for example, is given by the messy value:

\[
\frac{(B G X + b D C + g A + g G + g X)}{g (1 - c + b k/h + m) + b (m - g k/h)}
\]

This is just a complicated Keynesian multiplier whose multiplicity of terms should not blind us to the fact that it is a fixed, static level of nominal income (whose level would not be changed by a different lag structure since this is extinguished when determining the equilibrium). In short, the model is simply IS/LM/BP smoothly adjusting over time (or not, depending on lags and parameters) to its long-run equilibrium. Intervention might quicken this adjustment, alter its ultimate reserve position, but otherwise stabilisation is presumably about, and justified by, not allowing inflation and balance of payments deficits to get out of hand. In effect, this is to suggest that the economy no longer becomes represented by the equations as they damagingly break down (e.g., with unrealistically excessive capital inflows and need for excessively high interest rates). But this is not explicitly modelled — indeed, the model precludes it. If the argument is that stabilisation is required to prevent these normal relations from breaking down and making things very much worse, we might reasonably respond that we should seek to improve the underlying parameters if they are endogenous! Or is it that the endogenous parameters are only endogenous in one direction, that requiring austere intervention by FP? Either way, we do not have any account of how development (or the long run) is to be achieved (not least because the model is organised around static equilibrium).

**APPENDIX 3: MODELING THE MARRIAGE**

The purpose here is to expose formally the critical limitations of the Khan and Montiel model of merging the short-run and long-run models, respectively, of the IMF and the World Bank. This is to justify the results discussed informally in the main text. Their first equation is:

\[ dy = \alpha_0 + \alpha_1 dk \] (1)

where \( y \) is real output, \( k \) is capital stock, \( \alpha_0 \) is an autonomous increase in productivity, and \( \alpha_1 \) is the output-capital ratio. It follows immediately that steady-state balanced growth is impossible unless \( \alpha_0 \) is equal to zero. For, otherwise:

\[ \frac{dy}{y} = \frac{\alpha_0}{y} + \alpha_1 \frac{dk}{y} \]

Consequently, for constant \( dk/y \) (the real saving/investment rate, assumed constant at \( s \), say), the growth rate falls asymptotically towards \( \alpha_1 s \), the Harrod-Domar warranted growth rate as \( y \) increases.

This raises the issue of how to make a sensible treatment of the long-run growth path within this framework. An alternative to \( \alpha_0 = 0 \) is to make the productivity increase proportional to the economic variables, \( y \), say, rather than a lump absolute sum, irrespective of the existing size of the economy. Then, the equilibrium growth rate simply becomes equal to \( w = \alpha_0 + \alpha_1 s \) which is a more traditional way of imposing exogenous technical progress. It is, of course, tempting to suggest that the alternative formulation offered by Khan and Montiel, in which steady-state growth (i.e., long-run equilibrium) is impossible and (the absurd assumption that) the absolute contribution of technical progress is independent of the economy's scale, is a reflection both of the pessimistic and short-run outlook of the posited framework. This is a theme that will recur throughout what follows.

Consider, for example, the role of taxation, \( t \), and government expenditure, \( g \). With \( s \) now standing for the saving rate out of disposable income, and the government budget surplus (or government saving) being translated into net investment. Then, for Khan and Montiel:

\[ dk = s(y-t) + (t-g) \]

Again, without going into the simple details, steady-state balance growth is not possible unless \( t \) and \( g \) are made proportional to income. And, the short-run view makes a higher level of government expenditure and a lower level of taxation seem unduly disadvantageous to growth since, in the long
run, short-run increases above trend will subsequently fade into insignificance. If we assume that
government expenditure has no impact on growth, surely unreasonable in the long run, then if $t$ and $g$
now stand for their proportion of long-run income:

$$w = \frac{dy}{y} = a_0 + a_1 s + a_1 t(1-s) - a_1 g$$

Thus, $t$ and $g$ are equivalent to a positive and negative shift, respectively, in the warranted rate
of growth on the assumption, it is worth repeating, that the public saving is translated into real
investment and government expenditure makes no contribution to the growth rate.

Now let the balance of trade deficit in foreign currency be $B$. This is equivalent to an in-flow
of real resources so that the growth equation becomes modified as follows:

$$\frac{dy}{y} = w + \left(\frac{\alpha_1 e}{p}\right)B \quad (2)$$

where $p$ is the domestic price level, assumed to be equal to $e$ for purchasing power parity, and $e$ is the
exchange rate. Here, the trade balance is being allowed to vary with the real exchange rate, $e/p$, which
is an index of competitiveness. The higher is $p$ or the lower is $e$, the more expensive are domestically
produced goods, although the law of one price is not presumed to apply in that demand does not grow
indefinitely or collapse completely in case $e$ and $p$ are not equal to one another. The introduction of the
price variable $e/p$ allows the RMSM model to be integrated with the FP model.

But, to proceed further, it is necessary to be more specific about $B$. To allow for steady-state
balanced growth, assume for the moment that there is trade balance when output grows at its warranted
rate, $w$, and prices are at world levels. In other words, $e=p$, $B=0$ and $\frac{dy}{y} = w$ all hold in long-run
equilibrium. First, it is crucial to recognise that Khan and Montiel violate these assumptions, implicitly
precluding the possibility of steady state. For, their balance of trade (deficit) function is essentially
given by:

$$B = B_0 - \alpha p/e + \beta y \quad (3)$$

Consequently, as $y$ grows, there is an automatic movement into balance of trade deficit unless
the real domestic price level, $p/e$, falls at the same rate for which, of course, long-run equilibrium is
impossible, since it requires $p/e = 1$. Once again, this reflects both a short-run and pessimistic outlook,
in which a trade deficit grows with domestic income. It is as if there is no absolutely no potential for
export market growth, so that at purchasing power parity, $e=p$, the short-run deficit arising out of
growth of domestic income is projected into the long run. For steady state, it is necessary to assume
that world markets will grow at the same rate as the domestic warranted rate of growth. However, it is
still possible to retain the short-term features that appear to motivate Khan and Montiel. $B$ should be a
negative function of $p/e$, equal zero when both $p=e$ and $y=y eag$, and be a positive function of $y/y eag$. Khan and Montiel's specification is a negative function of $p/e$, but does not equal zero at $p=e$ and
$y=y eag$ (so that long-run equilibrium is impossible) and is a positive function of $y$ so that any sustained
growth inevitably creates a balance of trade deficit. Although the notion that growth of exports and the
domestic economy must be the same is far from realistic, it is surely preferable to precluding growth
other than through a balance of trade deficit! A simple suitable functional form for $B$, that captures the
required short-run features with the possibility of long-run balance, might be:

$$B = Z(p/e)y - X(p/e)y eag \quad (4)$$

where $Z$ and $X$ are imports and exports, respectively, and $Z'>0$, $X'<0$, and $Z(1)=X(1)$ for $p=e$.

In short, even to allow for sustainable long-run growth, the model of Khan and Montiel has to
be modified with equations (2) and (4) replacing (1) and (3), respectively. Otherwise, zero is the only
possible long-run growth rate.

From (2) growth depends simply on the resources devoted to investment from saving and the
balance of trade deficit. The latter, however, has to be covered by an out-flow of reserves, $R$, with the
balance of payments account completed by a flow of interest on the difference between foreign capital,
$F$, and reserves, and the new in-flow of foreign capital:
\[ dR = dF - B - i(F-R) \]

where \( i \) is the rate of interest. Rearranging:

\[ B = dF - dR - i(F-R) \quad (5) \]

From (2) and (5), the RMSM model follows with the growth rate determined by the extent to which the balance of trade deficit, \( B \), can be funded by reserves or foreign inflows:

Can we assume, as before, that there is balance of trade in the long run? First, \( p=e \) from purchasing power parity. From the supply-side, if trade does not balance in the long run, the growth rate will be shifted by the amount \( \alpha_1 B/y \). For steady-state, \( B \) must equal zero or grow, in equilibrium when \( p=e \), at the same rate as \( y \). In this latter case, the growth rate becomes \( w + \alpha_1 B_0/y_0 \), where the zero subscript denotes initial value for a variable growing at constant rate. Consequently, a permanent balance of trade deficit at equilibrium prices is consistent with steady-state, but is equivalent to an upward shift in the warranted rate of growth. Hence \( g = w + \alpha_1 B_0/y_0 \). Of course, a persisting and growing trade deficit needs to be financed, either by an inflow of foreign investment, \( F \), an outflow of foreign reserves, \( R \), or a balancing net inflow of interest payments on reserves.

The exact conditions under which this is possible are laid out in an Appendix 4. Note that, for steady state, exports and imports must both grow at the same rate as the economy, even if not equal to one another. For, if both grow steadily at different rates, the balance of trade, \( B \), and hence the economy, cannot grow steadily. De Pinies (1989) constructs a discrete model of the ratio of net debt to exports by assuming that exports and imports grow at different exogenously given rates, together with a given rate of interest. This is not consistent with steady-state growth as modeled here. On the assumption that imports and exports do grow at the same rate (\( b=1 \) in his terminology), the debt to export ratio is unstable when \( |a|>1 \) where \( a \) is the ratio of one plus the rate of interest to one plus the rate of growth of exports, unless certain initial conditions are exactly satisfied. This is like a special case of the results to be given here in the appendix, with trade given exogenously and independent of both output and domestic prices.

Whilst some might already be convinced that such possibilities are unrealistic in the long run, especially for developing countries under stabilisation, and because the shift in the growth rate and corresponding means of financing it can be netted out for the purposes of examining short-run movements around the trend, it will be assumed in what follows that \( B=0 \) in long-run steady-state. Note that, for this case, in long-run equilibrium, the rate of growth of \( (F-R) \) is given by \( i \) since, with \( B=0 \) in equation (5), \( dF-dR = i(F-R) \).

This completes the supply-side of the economy. The following proceeds by inserting these modified equations into the remaining elements of their model marriage, by adding the short-run analysis drawn from FP. This is in order to examine the relationship between the short and long runs. The demand-side, FP model, includes the identity for the balance of payments, and the generation of nominal income through the money supply as in the monetary approach to the balance of payments. This gives:

\[ v\{(1-\theta)p+\theta e\}y = eR + D \quad (6) \]

where \( v \) is the inverse of the velocity of circulation, \( D \) is domestic credit and \( \theta \) is the weight of importables. Through this and the previous equation, the level of reserves adjusts according to the balance of payments, and the level of nominal income adjusts according to the domestic and international sources of money.

It follows by taking differentials of (6) that:

\[ edR = vdy\{(1-\theta)p+\theta e\} + vy(1-\theta)dp - dD \quad (7) \]

But, from (5):

\[ dR = dF - B - i(F-R) \]

Substituting for \( R \) from (6) gives:
\[ dR = dF - B - (i/e)[eF - v\{(1-\theta)p + \theta e\}y + D] \] (8)

Eliminating \( dR \) between (7) and (8), and re-arranging and collecting terms, this leads to the following solution for \( dp \) in terms of \( p \) and \( y \):

\[ v(1-\theta)dp = v\{(1-\theta)p + \theta e\}(i - dy/y) + (edF + dD)/y - i(eF + D)/y - eB/y \] (9)

In steady-state long-run equilibrium, \( dy/y = w \) (or \( y = y_0e^{wt} \)), \( B = 0 \), and \( p = e \), and also \( dp = 0 \). Substituting into (9) gives:

\[ ev(i - w) + (edF + dD)/y_0e^{wt} - i(eF + D)/y_0e^{wt} = 0 \]

This is a differential equation in \( M = eF + D \), that part of the money supply made up of foreign capital and domestic currency, leaving aside own reserves \( R \). Whilst the first component, \( eF \), might be thought to be subject to uncertainty, the second can be controlled. In other words, the economy can be sustained in steady-state balanced growth by setting \( M \) according to:

\[ v(i - w) + (dM - iM)/y_0e^{wt} = 0 \]

The solution is given, for some constant \( A_0 \), by:

\[ M = A_0e^{it} + y_0e^{ewt} \] (10)

This rule for \( M \) will keep the economy in long-run equilibrium. It allows for two components of the money supply, one to grow at the rate of interest (to keep up with debt payments), and one to grow with the economy to allow for transactions.35

Now, although the rule for \( M \) given by (10) sustains equilibrium, it is not necessarily the policy to be adopted out of equilibrium. However, on the basis of uncertainty over foreign flows and in order to examine stability properties of the model, assume that the money supply rule given by (10) is adopted. Substituting (10) in (9) yields:

\[ v(1-\theta)dp = v\{(1-\theta)p + \theta e\}(i - dy/y) + M_0e^{wt}(w - i)/y - eB/y \]

But, from the supply-side, given by equation (2), substituting for \( dy/y \) yields:

\[ v(1-\theta)dp = (w - i)[M_0e^{wt}/y - v\{(1-\theta)p + \theta e\}] - eB/y[1 + ut\{(1-\theta)p + \theta e\}/p] \] (11)

Consider now the adjustment of \( p \) and \( y \) over time from equations (2) and (11). For the case where \( w = i \), the first term on the RHS of equation (11) for \( dp \) drops out, and both \( p \) and \( y \) can only take on their equilibrium values when \( B = 0 \), see also equation (2). When \( B > 0 \), \( y \) exceeds its warranted growth rate, \( w \), and \( p \) decreases, and vice-versa for \( B < 0 \). Figure 1 shows that the equilibrium, \( y/y_0e^{wt} = 1 \) and \( p = e \), is unstable. The locus of \( B = 0 \) is negatively sloped (trade balance with too high \( y \) if too low \( p/e \)). As the only point at which the adjustment over time can cut the \( B = 0 \) curve is at full equilibrium itself, it can be shown that there is no such path to equilibrium. With a balance of trade deficit, \( y \) grows too fast and, although \( p \) falls, the trade deficit persists because of the effect of too rapid output growth.

For the case where \( w \neq i \), equation (11) becomes:

\[ v(1-\theta)dp = (w - i)[evy_0e^{wt}/y - v\{(1-\theta)p + \theta e\}] - eB/y[1 + ut\{(1-\theta)p + \theta e\}/p] \]

For \( w \geq i \), consider the locus of \( dp = 0 \). When \( p \) and \( y \) are both above their equilibrium values, both \( -B \) and the first term on the RHS of the above equation are negative. It follows that one of these variables must be above and one below its equilibrium value for \( dp = 0 \). More generally, for plausible functional forms for \( B \), it can be shown that the locus of \( dp = 0 \) lies above, is steeper than, the curve \( B = 0 \) or where \( y \) takes on its equilibrium value. The phase diagram for this situation is shown in figure 2. Once again, the equilibrium is unstable but, in this case, it contains a saddle-point with a single path to equilibrium.
This can be illustrated as follows. Recall from (5) that, in long-run equilibrium, F-R grows at the rate i, but that M = \( A_0e^{it} + y_0e^{\alpha t} \) grows at the rate w. If, for convenience it is assumed that both F and D grow at the rate w, then R = \( R_0e^{it} + F_0(\frac{e^{\alpha t} - e^{i t}}{\alpha - i}) \). As \( w > i \), R also grows, even if asymptotically, at the rate w. If there is an initial balance of trade deficit, B > 0, and the price level is too high but the initial growth rate too low (to the south-east of equilibrium), then this implies that the initial level of reserves, R, is too high for equilibrium. With the trade deficit, B, allowing the growth rate to increase to its equilibrium level, it may just be sufficient to off-set the natural growth in reserves, given by \( w > i \), and hit the appropriate proportions of R and M at the equilibrium. Otherwise, there is instability.

Now consider the case where \( i > w \). This renders ambiguous the slope of the locus of \( dp = 0 \), although it is plausibly less steep than for \( w = i \). It can even be positively sloped. It implies that the equilibrium has a saddle-point, with one path to equilibrium, the model otherwise being unstable, figure 3. Thus, although there are interest rates higher than the growth rate, this can be stabilising should the natural run-down of reserves, on debt payment for F for \( i > w \), once again fortuitously place monetary stocks in the right proportions with the passage of time.

The two cases for which \( i \neq w \) now explain why equilibrium is unstable without saddle-point for \( i = w \). For, in this case, the ratio of reserves R to money supply component M cannot adjust even by chance to equilibrium proportions, since the adjustment can only be made through the difference between i and w.

The results of the analysis can be briefly summarised. First, despite claims to the contrary, the merged model proposed by Khan and Montiel does not combine the short and long runs to provide a theory of growth and adjustment. Second, this is because long-run, stable growth is precluded in their own version of the marriage. Third, the resulting pre-occupation with the short run is unduly pessimistic with the scope for adjustment (through policy-inspired parameter shifts in factor productivity and balance of trade, for example) being unscaled relative to output and, hence, increasingly limited automatically as growth occurs. Fourth, if the model is amended to allow for the possibility of steady-state balanced growth, it generally leads to unstable outcomes unless holdings of foreign reserves start or adjust by chance to the right proportions, or unless the monetary authority has the capacity both to identify the long-run growth path and to adjust to it directly. Finally, this implies that the table of results produced by Khan and Montiel, connecting shifts in exogenous and policy variables to adjustment in one period, are either totally meaningless or totally unnecessary. In case of imperfect monetary policy and instability, first period shifts do not necessarily indicate subsequent direction of movement nor changes in the underlying growth path, if any. For a perfect monetary authority, adjustment is irrelevant; it goes straight to the appropriate growth path.

Thus, the model presented by Khan and Montiel does not satisfactorily address the long run. It is worth recalling the economic assumptions on which it is based which tend to be obscured by the complexity of the algebra and their being mingled with accounting identities. There are saving, demand for money, production and balance of trade functions, all of which are extremely simple. It hardly seems that an apposite model of the long run could emerge from such a simple framework, let alone address the short run and the articulation between the two. It is totally incapable of addressing the fundamental policy issues of how to generate productivity increases and sustain international competitiveness. How the corresponding causal factors are situated relative to the short and long run is also necessarily absent. Further, as in all steady-state, long-run growth models, shift in the composition of output to reflect modernisation, industrialisation, or whatever, is inevitably absent even though this is the one concession that Agénor and Montiel (1996) make in constructing a specifically development macroeconomics, on which see below. Presumably, such sectoral and socio-economic transitions can be left to microeconomics and market forces.

APPENDIX 4: STEADY-STATE GROWTH WITH A GROWING BALANCE OF TRADE DEFICIT

In long-run steady-state growth with a persistent trade deficit growing at rate g so that B = B_0e^{\alpha t} that:

\[ g = w + \alpha B_0/y_0 \]

For \( dp = 0 \) and \( p = e \) in long-run equilibrium, from equation (9), equilibrium for M is given by:
\[ y_0e^{\gamma} (i-g)e^{\delta t} + dM - iM - eB_0e^{\delta t} = 0 \]

Hence, as long as \( g \neq i \):

\[ M = A_0e^{\gamma t} + (y_0e^{\gamma} + eB_0/(g-i))e^{\delta t} \]

This is a generalisation of the previous result, equivalent to a shift in \( y_0e^{\gamma} \) by the amount \( eB_0/(g-i) \), so that the analysis goes through as before. For the exceptional case, \( g = i \), the equation for \( M \) becomes:

\[ dM - gM - eB_0e^{\delta t} = 0 \]

This has solution, \( M = (M_0+eB_0)e^{\delta t} \). Without going into details, when this is substituted back into the short-run equations, whether there is stability or not is ambiguous, depending upon the elasticity of the balance of trade with respect to prices. This is hardly surprising as a simpler model, such as that of the J-curve, would create perverse effects if balance of payments worsened in the short-run in response to devaluation.

Figure 1: Dynamics for \( w = i \)

![Figure 1](image1.png)

Figure 2: Dynamics for \( w > i \)

![Figure 2](image2.png)
Figure 3: Dynamics for $w < 1$ with $dp = 0$ negatively sloped
Endnotes

* We offer this paper in the spirit and content of the work of Korkut and Oktar. It seeks to command and stretch the orthodoxy, undermining it on its own terms from more realistic and progressive perspectives. It both seeks originality whilst enabling students and others to draw upon and go beyond their mainstream learning. For this reason, most of the technical material has been included but placed in appendices to allow the arguments to flow freely and be accessible. The paper originated with Fine (1994) but is a revised version of Fine and Hailu (2000).

3 For an account of the content and emergence of the new Keynesian macroeconomics in the context of labour markets, see Fine (1998, Chapter 2).
4 As Polak’s paper was downloaded from the internet, page references are not given.
5 They refer explicitly to Taylor (1979, 1983 and 1991).
6 As Ascher (1996, p. 333) aptly puts it:

   The connections among economic theory, analytic approaches, and economic policy prescriptions have often been very loose. This has permitted the translations of neoclassical theory into applications and policy doctrines that have strayed rather far from original neoclassical tenets. This looseness has permitted the neoclassical methodological framework to swallow up alternative, so-called structuralist theoretical models. However, this neoclassical imperialism or consensus has limited the explicit consideration of development strategies, if not excluding the de facto selection of sectoral and distributional strategies. At the same time, the looseness has left neoclassical approaches vulnerable to suspect associations with regressive distributional doctrines, through equally loose or even unfair associations with austerity programs and “trickle-down economics”.

7 Whilst this is a mimeo, it reflects the work of those close to the IMF and/or World Bank. It might be refined for publication, but this does not get away from the nature and quality of the thinking involved from the outset.
8 So-called for one (small) country, with two sectors (exports and non-traded) and three goods (imports also).
10 Polak was Director of the Research Department at the IMF from 1958 to 1979.
11 Polak and Argy (1971), for example, adopt a simple version of the IS/LM/BP model. See Appendix 2.
12 See also Khan et al (eds) (1991), especially Khan et al (1991, p. 9) who concludes:

   As evident from the papers in this volume, all these factors combine to make today’s models quite different in both form and substance from those of yesterday.

13 Taylor (1988, p. 7) sets out the goals of stabilisation policies as described here.
15 This process is aided by devaluation and a fall in demand for imported goods. This simultaneous relationship between external and internal resource gaps can be demonstrated as follows: $Z - X = (I - S) + (G - T)$.
16 Mussa and Savastano (1999, p. 3) also note that:

   [M]ember’s more basic objectives of high output growth alleviating poverty, and so forth are not explicitly among those core areas. This does not imply unconcern with these objectives, but rather the priority that a country experiencing severe balance of payments difficulties must assign in the shorter term to ameliorate these difficulties and correcting the macroeconomic and structural imbalances at their root, in order to achieve more basic objectives in a sustainable manner over the longer term.
See Deraniyagala and Fine (2001) for a critical overview of the tensions between trade theory and trade policy.

Helleiner (1983, p. 352) notes that:

Getting prices right is slow-acting medicine in poorest countries where markets function more imperfectly because of rigidities, inflexibilities, and market segmentation. The short- to medium-term burden of adjustment inevitably fall disproportionately upon income and the volume of imports.

Poverty Reduction and Growth Facility.

The gesture, however, was not taken seriously among the critics as it meant strict conditionalities and long-term involvement of the IMF in a nation’s policy decision-making process. Moreover, the shift from short-term stabilisation to structural adjustment was merely a longer-term financial commitment rather than a major paradigm shift in ideological or theoretical terms. The IMF even in its structural adjustment programs relied on the traditional policy instruments. Exchange rate adjustment (devaluation), credit restraint and raising interest rates are the main policies still pursued. Moreover, the effect of adjustment on poverty alleviation has also become an important issue, Tanzi (1994). Even those closely associated with the IMF doubt the efficacy of macroeconomic adjustment in addressing poverty issues, Polak (1991).

The quotes are taken from the subtitle and title of their article, respectively. See also Khan and Montiel (1990).

For a critical exposition of the Khan and Montiel approach, see Tarp (1993) and Tarp and Brixen (1996), for example. Khan at al (1990) are not alone in attempting to merge the FP with other output models. The paper by Chand (1989) extended the basic FP model by endogenising nominal income within the FP framework itself. A more recent paper by Mikkelsen (1998) conducted an empirical exercise for El Salvador using the FP models with a neoclassical model of output determination. According to him, the FP framework could be modified and “an external debt bloc would be useful in order to give a more complete description of the debt dynamics”, p. 16.

Khan et al (1990, p. 178) also argue that the FM and RMSM survived for long despite their restrictive assumption because the models are “very transparent and thus easily understood. They also require very little information behaviour and are easy to apply”. However, it is not clear how such a complex issue such as growth can be captured with such simple restrictive models in the first place and the consequent more complicated merged model.

As in much economics, the precise distinctions and connections between the long and short runs are left vague as well as the justification for them.

In his comment on the marriage of the IMF and World Bank models, Polak (1990) argues the attempt, firstly, “incapacitates each from doing its own job”, secondly, “the simplicity that accounted for part of attraction of the two models is lost in their merger”, p. 184, and, finally, apart from intellectual curiosity, “it adds little to our knowledge on the crucial issues of growth-oriented adjustment”, p. 186. As far as the objective of raising output, Polak (1997) doubts that:

With respect to the second dimension, it is curious that for their medium-term macroeconomic projections both the IMF and the World Bank continue to rely on highly mechanical growth models of the Harrod-Domar family, first developed in the late 1940s. In these models there is no place for what the two institutions themselves consider the most important factors determining the growth of developing countries, such as outward orientation, realistic prices, privatisation, reform of the financial sector, and, in general, government attitude toward the economy… In a formal sense, it would not be particularly difficult to introduce these three extensions into the model. But that would be essentially useless unless it were also possible to obtain some order of magnitudes of the coefficients for the variables in the newly introduced equations. And that, unfortunately, is not possible. In this setting, the IMF has had to forgo the comfort of its own model and base its conditionality on a set of ad hoc instruments that seemed plausible in the circumstances.

Labour is implicitly assumed to be unlimited.

Selowsky and van der Tak (1986) employ the RMSM model to determine the shifts in the savings rate, the capital-output ratio, the export surplus and the availability of foreign finance which will warrant a
particular pattern of growth whilst eliminating debt. Necessarily, this avoids the issues of price determination and of determining whether steady state is stable. But, at least exports are allowed to grow in principle. Nonetheless, not surprisingly, conclusions are both pessimistic and, essentially, tautologous, p. 1115:

Regaining creditworthiness will be difficult to the extent that consumption growth cannot be restrained, the ICOR is high, exports cannot be rapidly expanded or imports compressed, and the average rate of interest on foreign debt is high.

In the context of Honduras, Caceras (1993) critically assesses this approach from the perspective of these variables not necessarily being under the control of domestic management.

29 This ends the discussion of fiscal balance as it is only referenced in order to illustrate growth pessimism.

30 There is a presumption here that the saving rate remains the same despite a balance of trade deficit so that the latter does not fund consumption at all.

31 Recall that any persistent and growing trade deficit has been netted out. Otherwise, it would be possible to set \( Z(1) > X(1) \).

32 See Appendix 1 for the model of financial programming in its pure form.

33 Khan and Montiel take \( \theta \) to be constant, which presumes a constant proportion of imports to domestic output. But if exports, imports and domestic output vary in different directions, as is assumed, for example, for a change in relative prices, \( p/e \), then \( \theta \) should vary also. In other words, \( \theta \) should reflect a weighted average of the nominal value of imports and domestic output, not of their prices. In what follows, this is set aside in conformity with Khan and Montiel.

34 \( A_0 \) is clearly given by \( D_0 + eF_{0r}y_0ev \).

35 The final component in the money supply as a whole is reserves, \( R \), and interest paid on them. Note that, if \( A_0 \) is negative and \( i > w \), \( M \) will eventually grow negatively large. This needs to be ruled out unless \( R_0 > A_0 \). Then, interest on reserves is coming in fast enough to counter falls in other sources of money.
References


